

CENTRAL INTELLIGENCE AGENCY

REPORT

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KTB-21

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1. [redacted] KTB-21 will be dissolved on 31 March 1949.
2. Some of the members of this Bureau who were transferred from Koch und Sterzel are now returning to their former positions. Other employees of the Bureau are uncertain about their future.
3. Professor Bamdbas was head of KTB-21 from 1945 to 1947. In 1947 he visited the USSR; during his absence the Bureau was headed by a Soviet X-ray specialist, whose name is unknown. When Bamdbas returned from his visit in 1947, he became head of the Niederwartha project, working directly under SMA, Karlshorst. [redacted] in the latter part of 1948 Bamdbas was taken back to Moscow by the MVD and has not been heard of since.
4. The present Soviet head of KTB-21 is Major Barsky, who is an ardent Communist. Since Bamdbas' departure, Barsky has also taken over control of the Niederwartha project.
5. The following are employed at present by the Bureau:
 - a. Dipl. Ing. Stejskal* - German head of the Bureau under Barsky.
 - b. Obering. Bahrman - Former head of the construction department at Koch und Sterzel. Bahrman has been writing a thesis for the Soviets on the construction of medium and large transformers.
 - c. Dr. Winter - In 1948 he was responsible for the theory and successful construction of a small rheotron in the workshop of the Bureau (situated in the same building as its offices). He worked on the principles of Prof. Bicht (sic, Picht?) of Berlin.
 - d. Ing. Zirkel - Head constructor.
 - e. Obering. Brey.

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- f. Ing. Richard Gussmann - Betriebsleiter responsible for the completion of apparatus. Formerly Betriebsleiter of Koch und Sterzel, specially transferred because of his great ability.
- g. Dipl. Ing. Schnuhr.
- h. Dipl. Ing. Koettnitz - Part-time worker, has designed an X-ray apparatus for investigation of materials with a capacity of 200 KV. This has been built and tested in the Bureau's workshops and accepted by Moscow. An apparatus with a capacity of 400 KV is being tested, and it is hoped soon to produce one of 800 KV capacity.
- i. Von Schiesszel - Engineer in charge of testing.
- j. Kosmar - Head of the workshop.
- k. Schurich - Senior fitter.
- l. A small number of very highly skilled glass-blowers formerly of Siemens, Rudolstadt.

Koch und Sterzel

- 6. The principle lines of research and development at Koch und Sterzel are "Strom und Spannungswandler" (current transformer and potential transformer) up to capacities of 220 KV, small regulating transformers for voltage control, all sizes of transformers for reparations, and medical X-ray apparatus.
- 7. In conjunction with KTB-21, current and voltage transformers of 440 KV are being developed. A similar development is taking place in AEG, Berlin, under the direction of a Soviet specialist, Aronovich. These are required for the 440 KV connecting system in the Ural industrial areas.
- 8. A transformer of 250 KVA/500 KV has already been produced by Koch und Sterzel, and an experimental high tension transformer, 450 KVA/750 KV single-phase, could be produced there.
- 9. The lack of good transformer sheet-metal is causing a serious bottleneck in production, since it is no longer available . Former standards required a loss of only 1.1 W/kg, but now the best that can be obtained from Upper Silesian and Czechoslovak sheet has a loss of 1.8 W/kg. Transformer oil is still obtained from the Netherlands.**
- 10. Personalities at Koch und Sterzel include the following:
 - a. Either***- Head of the firm.
 - b. Jahn - Head of the business department.
 - c. Dr. Stamm - Technical head.
 - d. Dr. Clausnitzer - Head of laboratory.
 - e. Dunkel - In charge of construction.

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- f. Ing. Tesch - Specialist for heavy-load switches; Tesch recently made a trip to Moscow to help overcome some technical difficulties. His trip, however, was very unsuccessful, since the Soviets, for security reasons, allowed him to see only the switches as finished products and did not permit him to visit the factories where they are made. While in the USSR, Tesch was able to visit F.J. Fischer, formerly manager of Koch und Sterzel Transformer Works, and Head Constructor of KTB-21 until he left Germany.

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Niederwartha Power Station

11. The apparatus in the former turbine shed of the dismantled Niederwartha pumping station is fed from a normal electricity net of 50 cycles. Its purpose is the generation of a very high DC voltage by means of "Glühkathodenventilen" (glow-cathode valves). The planned operation is three million volts at 30 m A.
12. Serious difficulties have been encountered and the most that the apparatus has so far achieved is 1.6 million volts at 3 m A. One of the main reasons for this is that the site chosen for its erection is extremely damp; consequently, the hard paper pillars (Hartpapiersäule), which were intended both to support it and to insulate it from the ground, only partially fulfill the latter function.
13. Counter measures being taken at present are the installation of coke ovens to dry the atmosphere and pillars, and the construction of porcelain supports (in a factory near Meiningen) which are to replace the paper ones as soon as possible.
14. Because of Soviet demands, far too much experimenting and testing is going on, with the result that even if the planned capacity is ever attained, its operational life will already have been largely consumed when the apparatus is finally handed over to the Soviets.
15. The weakest part of the apparatus is its accelerating tube (Beschleunigungrohr), the design of which was based on the calculations of Eiselt, who is now believed to be employed at Siemens in Erlangen.
16. A Soviet commission of experts is expected to visit Niederwartha to inspect the apparatus.

Comment: Probably identical with Steska.

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Comment: Some good sheet metal was recently purchased from the Soviets and it was discovered to be part of a reparations shipment taken to the USSR after the war.

Comment: Probably identical with Bruno Eidner.

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